

RAILROAD COMMISSION OF TEXAS HEARINGS DIVISION

OIL AND GAS DOCKET NO. 01-0290632

THE APPLICATION OF BLACKBRUSH O&G, LLC TO AMEND FIELD RULES FOR THE AWP (OLMOS) FIELD LA SALLE & MCMULLEN COUNTIES, TEXAS

HEARD BY: Karl Caldwell – Technical Examiner

Marshall Enquist – Legal Examiner

DATE OF HEARING:

September 11, 2014

APPEARANCES:

REPRESENTING:

APPLICANT:

Clark Jobe

Blackbrush O&G, LLC

Michael Younger John McBeath

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Field rules for the A.W.P. (Olmos) Field were adopted in Final Order 1-88,712, effective February 8, 1988, and amended in Final Order No. 01-0277308, effective January 29, 2013. The current field rules in effect for the field are summarized as follows:

- 1. Correlative interval from 9,000 to 10,154 feet as shown on the log for the Escondido Resources II, LLC Nichols Lease, Well No. 1H (API No. 42-311-34298) is designated as the A.W.P. (Olmos) Field;
- 2. 467'-933' spacing for oil wells, with no minimum between well spacing between horizontal and vertical wells, a 50' box rule, and off-lease penetration point;

- 3. 80 acre proration units for oil or gas, with a 3,250' maximum diagonal, 40 acre tolerance, with 40 acre optional units with a 2,100' maximum diagonal, filing of proration unit plats;
- 4. Oil allocation based on 100% acres with a maximum allowable of 272 BOPD, allocation formula for gas suspended.

Blackbrush Oil & Gas, LLC ("Blackbrush") requests that the field rules be amended as shown below:

- 1. No change;
- 2. 330' lease line spacing with dual lease line spacing of 330'-100' for horizontal wells, no between well spacing limitation between horizontal wells and vertical or horizontal wells, assigning additional acreage to horizontal wells pursuant to Statewide Rule 86 with the length of the lateral measured from first take point to last take point, and a box rule of 33':
- 3. No maximum diagonal, proration plats not required with the filing of Form P-15 to list the number of acres assigned for proration purposes;
- 4. No change;
- 5. A proposed rule for administrative exceptions to the tubing requirement in Statewide Rule 13;
- 6. An exception to the allowable effective date provision of Statewide Rule 51 for good cause shown.

The application is unprotested and the examiners recommend that the field rules be amended, as proposed by Blackbrush.

DISCUSSION OF THE EVIDENCE

The A.W.P. (Olmos) Field was discovered December 20, 1981 at a depth of 9,800 feet. The September 1, 2014 oil proration schedule lists Blackbrush as a current operator in the subject field. Blackbrush intends to commence pad drilling with three to six wells drilled from a single pad to reduce costs. Blackbrush has run a Formation Micro-Imaging (FMI) logging tool in several wells in the field and determined the direction of natural fractures. Core analysis has determined the Olmos Formation to have a very low permeability, ranging from 0.01 to 0.05 millidarcies. Blackbrush's wells

are drilled to intersect the natural fractures that occur in the formation, and induced fractures from hydraulic fractures stimulation will occur in the same direction as the natural fractures.

Since Blackbrush has determined the orientation of natural fractures and induced fractures in the field, wells are drilled perpendicular to the fracture plane. As a result, Blackbrush is proposing lease line spacing for vertical wells of 330 feet and lease line spacing for horizontal wells of 330 feet perpendicular to the wellbore and 100 feet lease line spacing form the first and last take points. Blackbrush estimates that the potential waste with the current first and last take point spacing of 467 feet from the lease line compared to the proposed 100 feet to be 49,278 BO per well. This production value is based on the current recovery of 67.14 BO per foot of lateral. The potential waste based on Blackbrush's proposed 100 well drilling program is estimated to be 4,927,766 BO. Blackbrush also requests a box rule of 33 feet as opposed to the current rule of 50 feet, as 33 feet would be a 10% tolerance to the proposed lease line spacing of 330 feet.

Blackbrush proposes no between well limitations in the field since multiple wells will be drilled from a single pad location. It is common for surface locations to be 20 to 30 feet apart, with the wellbore trajectories drilled away from the other wells drilled from the same pad location. Operators in the field would have access to less of the productive interval, and laterals would be shorter if the laterals were required to be 933 feet apart. An off-lease penetration point will prevent waste by allowing operators to access more of the productive formation. Blackbrush requests to assign additional acreage to horizontal wells pursuant to Statewide Rule 86, with the length of the lateral measured from the first take point to the last take point as opposed to the penetration point to the terminus point.

Blackbrush is requesting a no perf zone rule as per the typical language that has been adopted in numerous fields. Blackbrush also requests that proration unit plats not be required for individual wells, but that Form P-15 be filed to designate the number of acres to be assigned to each well, as well as no maximum diagonal limitation. Removing the maximum diagonal limitation from the field rules will allow operators greater flexibility in planning and drilling wells.

Lastly, Blackbrush requests that the administrative exceptions to the tubing requirement in Statewide Rule 13 and the allowable effective date provision of Statewide Rule 51 adopted in Final Order No. 01-0282092 for the Eagleville (Eagle Ford-1) Field be adopted for the A.W.P. (Olmos) Field. Wells completed in the A.W.P. (Olmos) Field require a certain amount of flowback time and volume to determine if all of the frac stages are contributing. Blackbrush's witness testified that Statewide Rule 13 requires operators to run tubing fairly quickly, and does not allow enough time to flowback wells and run production logs to determine if all zones are contributing. If an operator determines that not all stages are contributing to the overall production of the

well, the operator is faced with an economic decision. If tubing has already been run in the well prior to receiving the production logs results, an operator would have to decide whether to pull the tubing, enter the wellbore and mill out the permanent packer, and clean out stages not contributing. There lies a potential for waste in that zones (frac stages) may be left behind if it is determined that some zones are not contributing and tubing has already been run in the well.

Another reason for these rule requests is that Blackbrush is planning pad drilling operations. In order to improve the economics of the wells in the field, Blackbrush plans to drill three to six wells from a single pad location. All of the wells drilled from a common pad would be drilled, and then hydraulically fracture stimulated sequentially, followed by running tubing in all wells at the same time. Blackbrush's witness testified that to follow that procedure for all six wells operators need additional time. The examiners requested Blackbrush to provide a late-filed exhibit demonstrating where the proposed field rule Nos. 5 and 6 have been previously adopted. Blackbrush provided a copy of Final Order No. 01-0282089 as Late Filed Exhibit No. 17 demonstrating where the proposed field rules Nos. 5 and 6 had been previously adopted in the Eagleville 9Eagle Ford-1) Field.

Blackbrush also requests that the allocation formula remain suspended as long as there is a market demand for all of the gas in the subject field.

FINDINGS OF FACT

- 1. Notice of this hearing was provided to all persons entitled to notice at least ten (10) days prior to the date of the hearing and no protests were received.
- 2. The A.W.P. (Olmos) Field was discovered December 20, 1981 at a depth of 9,800 feet.
- 3. Field rules for the A.W.P. (Olmos) Field were last amended in Final Order No. 01-0277308, effective February 20, 2013.
- 4. 330 feet lease line spacing has been adopted in numerous other Olmos fields.
- 5. The administrative exceptions to the tubing requirement in Statewide Rule 13 and the allowable effective date provision of Statewide Rule 51 proposed for the A.W.P. (Olmos) Field were adopted in Final Order No. 01-0282092 for the Eagleville (Eagle Ford-1) Field.

CONCLUSIONS OF LAW

- 1. Proper notice was issued as required by all applicable statutes and regulatory codes.
- 2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.
- 3. Amending the field rules for the A.W.P. (Olmos) Field will prevent waste.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission amend the field rules for the A.W.P. (Olmos) Field, as proposed by Blackbrush O&G, LLC.

Respectfully submitted,

Karl Caldwell

Technical Examiner

Marshall Enquist

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Legal Examiner